

# TRANSPORTATION ENGINEER I

**GRADE: 20**

**FLSA: EXEMPT**

## CHARACTERISTICS OF CLASS:

The Transportation Engineer I performs difficult professional and related administrative work in the investigation, design and construction of municipal traffic, transportation and other projects. Work involves responsibility for the application of professional engineering skills to a wide variety of planning and design problems. The incumbent manages individual design projects and may direct and supervise the work of other engineering personnel in project execution. Work is both proactive and reactive with high-level contacts on matters requiring cooperation and explanation. Physical demands are light and the work involves mental effort and stress in handling multiple projects in meeting deadlines. Work is directed and subject to general supervisory review, with serious consequences. The incumbent is assigned to the Engineering Division with work usually assigned and monitored by the Senior Engineering staff.

## EXPECTATIONS OF ALL CITY EMPLOYEES:

- Learn and demonstrate an understanding of City, department, division and team goals.
- Serve and meet the needs of customers during routine or emergency situations.
- Ability and willingness to work as part of a team, to demonstrate team skills and to perform a fair share of team responsibilities.
- Ability to assess his/her work performance or the work performance of the team.
- Plan and organize his/her work, time and resources, and if applicable that of subordinates.
- Contribute to the development of others and/or the working unit or overall organization.
- Produce desired work outcomes including quality, quantity and timeliness.
- Communicate effectively with peers, supervisors, subordinates and people to whom service is provided.
- Understand and value differences in employees and value input from others.
- Consistently report to work and work assignments prepared and on schedule.
- Consistently display a positive behavior with regard to work, willingly accept constructive criticism and be respectful of others.

## EXAMPLES OF DUTIES:

- Plans, designs and manages the construction of public streets, pedestrian ways, drainage, traffic controls, street lighting, bikepaths and other Public Works projects.

- Prepares plans, specifications, and estimates for major design, construction and operational contracts. Prepares and evaluates proposals for engineering consulting design contracts.
- Reviews site and subdivision plans, and recommends permit conditions to meet standards and conform with good practice. Identifies transportation amenities needed in new developments and works with developers in the planning of street systems and pedestrian/bicycle ways.
- Reviews traffic impact studies as part of the development review process.
- Studies major engineering problems and recommends the best course of action to the supervisor
- Annually assists in preparing the City's transportation Capital Improvements Program and the operating budget for the Traffic and Transportation Engineering Division.
- Investigates and recommends the need for new or improved traffic control devices on City streets. Collects applicable traffic data.
- Prepares Traffic Orders, recommends modifications to traffic regulations.
- Reviews and recommends actions on Public Works permit applications for projects affecting City streets.
- Maintains operation of the City's computer-based traffic signal system. Maintains records for both City-owned and State-owned signals inside the City limits.
- Coordinates City street lighting programs; investigates and recommends the need for lighting modifications and coordinates installations, removals, repairs and conversions. Administers street light maintenance and repair contracts, and acts as liaison with PEPCO in street lighting matters.
- May act as liaison between the City and county, state, and federal transportation agencies in all matters pertaining to streets and highways, and as staff liaison for the Traffic and Transportation Commission.
- Provides engineering guidance to Public Works operating divisions and other Departments as required.
- Performs other duties as required.

## **QUALIFICATIONS:**

### **Required Training and Experience:**

Any combination of training and experience substantially equivalent to graduation from an accredited four year college or university in civil engineering with major course work in Traffic and Transportation. Responsible experience in the engineering of traffic and transportation projects is preferred. Possession of (or ability to obtain) certification from the Board of Registration for Professional Engineers for the State of Maryland within a reasonable amount of time as determined by the City. Possession of an appropriate driver's license valid in the State of Maryland.

### **Preferred Knowledge, Skills and Abilities:**

- Knowledge of the principles and practices of civil engineering as applied to the planning design and construction of urban streets, traffic control devices, street lighting, pedestrian walkways, bikepaths, etc.
- Knowledge of codes, ordinances, regulations, and standards pertaining to roadway design. Considerable knowledge of traffic and vehicle law.
- Knowledge of traffic control equipment and devices, its uses, capabilities and limitations, and of traffic control materials.
- Knowledge of traffic and transportation planning principles and practices.
- Skill in establishing and maintaining effective working relationships with fellow employees, public officials, and the general public.
- Skill in performing engineering computations, estimates, and designs, with specialized emphasis on roadway geometry and traffic signal timing.
- Skill in using computers for word and data processing, and for specialized engineering functions.
- Ability to communicate effectively both orally and in writing.
- Ability to plan, schedule, and manage the activities of professional, technical, and administrative personnel engaged in a wide variety of data collection, design, research, and inspection activities.

Revised: 3/11